

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An exposure apparatus, comprising
~~a projection optical system which projects and an optical member which transfers a pattern formed on a mask onto a substrate, and a substrate stage, a movable member, positioned below said projection optical system, the optical member, which while holding said substrate the substrate moves in directions substantially perpendicular to a direction of the optical axis of said projection optical system, the optical member, comprising:~~
~~a detector, positioned on a periphery of said projection optical system, the optical member, which detects the position of said substrate stage or of said the movable member or of the substrate along said optical the optical axis direction; and a control device, which device connected to the detector, which receives positioning information obtained by the detector and halts or reverses movement of said substrate stage the movable member in a direction substantially perpendicular to the direction of the optical axis of said projection optical system based on the result of detection by said detector. the optical member.~~
2. (Currently Amended) The exposure apparatus according to claim 1, further comprising an elevating device which moves ~~said substrate stage in said the movable member in the optical axis direction, wherein said control the control device operates said elevating the elevating device based on detection results of said of the detector to move said substrate stage the movable member away from said projection optical system along said the optical member along the optical axis direction.~~

3. (Currently Amended) The exposure apparatus according to claim 2, wherein ~~said detector~~ the detector is positioned in a plurality of positions, at greater distances from ~~said projection optical system~~ the optical member in directions substantially perpendicular to ~~said optical~~ the optical axis direction than the stopping distance of ~~said substrate stage~~ the movable member.

4. (Currently Amended) The exposure apparatus according to claim 1, further comprising ~~an vibration a vibration~~ isolation device which supports ~~said projection optical system~~ the optical member while preventing vibrations, movably along ~~said optical~~ the optical axis direction,

wherein ~~said control~~ the control device operates ~~said vibration the vibration~~ isolation device to raise ~~said projection optical system in said~~ the optical member in the optical axis direction, based on detection results ~~of said~~ of the detector.

5. (Currently Amended) The exposure apparatus according to claim 1, further comprising a second vibration isolation device which supports ~~said substrate stage~~ the movable member while preventing vibrations, movably ~~along said~~ along the optical axis direction,

wherein ~~said control~~ the control device operates ~~said second~~ the second vibration isolation device to lower ~~said substrate stage in said~~ the movable member in the optical axis direction, based on detection results ~~of said~~ of the detector.

6. (Currently Amended) The exposure apparatus according to claim 1, further comprising:

a vibration isolation device, which supports ~~said projection optical system~~ the optical member so as to prevent vibrations, movably along ~~said optical~~ the optical axis direction; and

a second vibration isolation device, which supports ~~said substrate stage~~ ~~the~~ movable member so as to prevent vibrations, movably along ~~said optical~~ ~~the optical axis~~ direction,

wherein ~~said control~~ the control device controls at least one of ~~said vibration~~ ~~the vibration~~ isolation device and ~~said second~~ ~~the second~~ vibration isolation device to move ~~said substrate stage~~ and ~~said projection optical system~~ along ~~said~~ the movable member and the optical member along the optical axis direction, based on detection results of ~~said~~ of the detector.

7. (Currently Amended) An exposure apparatus, in which the space between a projection optical system which projects a pattern onto an object and an object placed on the image-plane side of ~~said projection~~ the projection optical system is filled with a liquid, and exposure to ~~said pattern~~ the pattern is performed through the liquid, comprising:

an opposing member, positioned apart from ~~said object~~ the object in the direction of the optical axis of ~~said projection~~ the projection optical system; and

a control device, which, in response to notification of occurrence of an abnormality, moves ~~said object~~ and the object and the opposing member apart ~~along said~~ along the optical axis direction.

8. (Currently Amended) The exposure apparatus according to claim 7, wherein ~~said control~~ the control device, in response to notification of occurrence of an earthquake, moves ~~said object~~ and the object and the opposing member apart along ~~said optical~~ the optical axis direction.

9. (Currently Amended) The exposure apparatus according to claim 8, wherein ~~said object~~ the object is movable within the plane perpendicular to ~~said optical~~ the optical axis, and ~~said control~~ the control device, in response to notification of abnormal operation of

~~said object, moves said object and said the object, moves the object and the opposing member apart along said optical the optical axis direction.~~

10. (Currently Amended) The exposure apparatus according to claim 8, further comprising an elevating device which moves ~~said object in said the object in the~~ optical axis direction and a driving device which ~~drives said drives the~~ opposing member in ~~said optical the optical~~ axis direction,

wherein ~~said control the control~~ device controls at least one of ~~said elevating the elevating~~ device and ~~said driving the driving~~ device to move apart ~~said object and said the object and the~~ opposing member along ~~said optical the optical~~ axis direction.

11. (Currently Amended) The exposure apparatus according to claim 10, further comprising a first frame which supports ~~said opposing the opposing~~ member, and wherein ~~said driving the driving~~ device is ~~an vibration a vibration~~ isolation device which supports ~~said opposing the opposing~~ member, movably in ~~said optical the optical~~ axis direction, through ~~said first the first~~ frame.

12. (Currently Amended) The exposure apparatus according to claim 11, further comprising a second vibration isolation device which supports ~~said object the object~~ movably along ~~said optical the optical~~ axis direction,

wherein ~~said control the control~~ device controls at least one of ~~said elevating device, said the elevating device, the vibration isolation device, and said second the second~~ vibration isolation device to move apart ~~said object and said the object and the~~ opposing member along ~~said optical the optical~~ axis direction.

13. (Currently Amended) The exposure apparatus according to claim 10, wherein ~~said driving the driving~~ device drives ~~said opposing the opposing~~ member, relative to ~~said projection the projection~~ optical system, in ~~said optical the optical~~ axis direction.

14. (Currently Amended) The exposure apparatus according to claim 7, wherein ~~said object~~ the object is a substrate for exposure to ~~said pattern~~ the pattern or a substrate stage holding ~~said substrate~~, the substrate, and movable with at least three degrees of freedom.

15. (Currently Amended) The exposure apparatus according to claim 7, wherein ~~said opposing~~ the opposing member comprises at least one of a liquid supply device which supplies liquid to the space between ~~said projection~~ the projection optical system and ~~said object~~, the object, and a liquid recovery device which recovers ~~said liquid~~ the liquid.

16. (Currently Amended) A device manufacturing method, comprising a lithography process, wherein in ~~said lithography~~ the lithography process, an exposure apparatus according to ~~Claim 1~~. claim 1 is used.

17. (Currently Amended) An exposure apparatus, in which the space between a projection optical system which projects a pattern onto an object and ~~said object~~ the object placed on the image-plane side of ~~said projection~~ the projection optical system is filled with a liquid, and exposure to ~~said pattern~~ the pattern is performed through the liquid, comprising:

an opposing member, positioned apart from ~~said object~~ the object in a direction of the optical axis of ~~said projection~~ the projection optical system, and being movable relative to ~~said projection~~ the projection optical system in ~~said optical~~ the optical axis direction;

a first frame which supports ~~said opposing~~ the opposing member;
an elevating device which moves ~~said object~~ in ~~said~~ the object in the optical axis direction;

a vibration isolation device which supports ~~said opposing~~ the opposing member, movably in ~~said optical~~ the optical axis direction, through ~~said first~~ the first frame; and

a control device, which, in response to notification of occurrence of an abnormality, controls at least one of ~~said elevating the elevating~~ device and ~~said vibration the vibration~~ isolation device to move apart ~~said object and said the object and the opposing~~ member along ~~said optical the optical~~ axis direction.

18. (Currently Amended) The exposure apparatus according to claim 17, wherein ~~said control the control~~ device, in response to notification of occurrence of an earthquake, moves ~~said object and said the object and the opposing~~ member apart along ~~said optical the optical~~ axis direction.

19. (Currently Amended) The exposure apparatus according to claim 18, wherein ~~said object the object~~ is movable within the plane perpendicular to ~~said optical the optical~~ axis, and ~~said control the control~~ device, in response to notification of abnormal operation of ~~said object, moves said the object, moves the object and said opposing the opposing~~ member apart along ~~said optical the optical~~ axis direction.

20. (Currently Amended) The exposure apparatus according to claim 17, wherein ~~said vibration the vibration~~ isolation device has a driving device, and ~~said control the control~~ device controls ~~said driving the driving~~ device to move apart ~~said object and said the object and the opposing~~ member along ~~said optical the optical~~ axis direction.

21. (Currently Amended) The exposure apparatus according to claim 20, further comprising a second vibration isolation device which supports ~~said object the object~~ movably along ~~said optical the optical~~ axis direction,

wherein ~~said control the control~~ device controls at least one of ~~said elevating device, said the elevating device, the vibration isolation device, and said second the second~~ vibration isolation device to move apart ~~said object and said the object and the opposing~~ member along ~~said optical the optical~~ axis direction.

22. (Currently Amended) The exposure apparatus according to claim 17, further comprising a driving device which drives ~~said opposing the opposing~~ member, relative to ~~said projection the projection~~ optical system, in ~~said optical the optical~~ axis direction.

23. (Currently Amended) The exposure apparatus according to claim 17, wherein ~~said object the object~~ is a substrate for exposure to ~~said pattern the pattern~~ or a substrate stage holding ~~said substrate, the substrate,~~ and movable with at least three degrees of freedom.

24. (Currently Amended) The exposure apparatus according to claim 17, wherein ~~said opposing the opposing~~ member comprises at least one of a liquid supply device which supplies liquid to the space between ~~said projection the projection~~ optical system and ~~said object, the object,~~ and a liquid recovery device which recovers ~~said liquid. the liquid.~~

25. (Currently Amended) A device manufacturing method, comprising a lithography process, wherein in ~~said lithography the lithography~~ process, an exposure apparatus according to claim 17 is used.

26. (New) The exposure apparatus according to claim 1, wherein the exposure apparatus comprises a plurality of detectors, and, in response to detection results assigned to the plurality of the detectors, the controller instructs the movable member to perform a plurality of mutually different movements.

27. (New) The exposure apparatus according to claim 1, wherein in response to the position of the movable member or of the substrate along the optical axis direction detected by the detector, the controller instructs the movable member to perform a plurality of mutually different movements.

28. (New) The exposure apparatus according to claim 1, wherein a detection result obtained by the detector reflects the movement status of the movable member.

29. (New) The exposure apparatus according to claim 7, wherein
the control device determines the occurrence of the abnormality using a value
stored in advance.
30. (New) The exposure apparatus according to claim 7, wherein
the object is a plurality of substrate stages, each of which holds a substrate for
exposure to the pattern, and is movable with at least three degrees of freedom, and
upon occurrence of an abnormality in either of the substrate stages, the
substrate stage and the opposing member are moved mutually away from each other along the
optical axis direction.
31. (New) An exposure apparatus, in which the space between an optical member
which projects a pattern onto an object and the object placed on the image-plane side of the
optical member is filled with a liquid, and exposure to the pattern is performed through the
liquid, comprising:
an opposing member, positioned apart from the object in the direction of an
optical axis of the optical member, a driving device to drive the opposing member and
a control device, which, in response to notification of occurrence of an
abnormality, moves the object and the opposing member apart along the optical axis
direction,
wherein the opposing member is movable, relative to the optical member, in
the optical axis direction.
32. (New) The exposure apparatus according to claim 31, further comprising:
a first frame which supports the opposing member, wherein the driving device
is constituted by a vibration isolation device which supports the opposing member, movably
in the optical axis direction, via the first frame.
33. (New) The exposure apparatus according to claim 31, further comprising:

a driving device which is capable of moving the object in the optical axis direction, wherein the control device controls at least one of the driving device and the vibration isolation device to move apart the object and the opposing member along the optical axis direction

34. (New) The exposure apparatus according to claim 31, wherein the object is movable within the plane perpendicular to the optical axis, and the control device, in response to notification of abnormal operation of the object, moves the object and the opposing member apart along the optical axis direction.

35. (New) The exposure apparatus according to claim 31, further comprising:
a second vibration isolation device which supports the object movably along the optical axis direction, wherein the control device controls at least one of the driving device, the vibration isolation device, and the second vibration isolation device to move apart the object and the opposing member along the optical axis direction.

36. (New) The exposure apparatus according to claim 31, wherein the object is a substrate for exposure to the pattern or a movable member holding the substrate, and movable with at least three degrees of freedom.

37. (New) The exposure apparatus according to claim 31, wherein the opposing member comprises at least one of a liquid supply device which supplies liquid to the space between the optical member and the object, and a liquid recovery device which recovers the liquid.

38. (New) The exposure apparatus according to claim 31, wherein the control device, in response to notification of occurrence of an earthquake, moves the object and the opposing member apart along the optical axis direction.

39. (New) A device manufacturing method, comprising a lithography process, wherein in the lithography process, an exposure apparatus according to claim 31 is used.